MECHANICAL DATA SHEET: VESSEL

PLANT ITEM No. R10045226

24590-PTF-MV-PWD-VSL-00046

Project.	***RPP-WTP***	P&ID:	***24590-PTF-M6-PWD-P0043***
Project No:	***24590***	Process Data Sheet	***N/A***
Project Site	***Hanford***	Vessel Drawing	***24590-PTF-MV-PWD-P0005***
Description.	***C3 Floor Drain Collection Vessel*** 1		

ISSUED BY RPP-WTP PDC 3/27/03 DATE

Reference Data

Charge Vessels (Plant Item Numbers)	***None***
Pulsejet Mixers / Agitators (Plant Item Numbers)	***None***
RFD(s)/Pump(s) (Plant Item Numbers)	***None***

Design Data

Quality Level		***CM***			*Fabrication Specs*	***24590-WTP-3PS-MV00-TP001***	
Seismic Category		***SC-IV***			*Design Code*	***ASME VIII Div 1***	
Service/Contents		***C3 Drain Fluids***			*Code Stamp*	***Yes***	
Design Specific Gravity		***1.12***			*NB Registration*	***Yes***	
Operating Volume	gal	***4792***			Weights (lbs)	Empty	Operating / Test
Total Volume	gal	***4982***			Estimated	***9500 lbs***	***57800 lbs*** / ***53000 lbs***
					Actual *		

Inside Diameter	inch	***96***			Wind Design	***Not Required***	
Length/Height (TL-TL)	inch	***126***			Snow Design	***Not Required***	
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design	***24590-WTP-3PS-MV00-TP002***	
						24590-WTP-3PS-FB01-T0001	
Internal Pressure	psig	***58***	***68***	***N/A***	Seismic Base Moment *	ft*lb	
External Pressure	psig	***4.5***	***FV***	***N/A***	Postweld Heat Treat	***Not Required***	
Temperature	°F	***200***	***225***	***N/A***	Corrosion Allowance	Inch	***0.040***
Min Design Metal Temp.	°F	***20***			Hydrostatic Test Pressure *	Psig	

MARK W. HOFFMANN STATE OF WASHINGTON 0030952 REGISTERED PROFESSIONAL ENGINEER 3/27/03

EXPIRES 12/10/04

This Bound Document Contains a total of 2 pages

REV	DATE	REASON FOR REVISION	PREPARER	CHECKER	APPROVER
1	3/27/03	Revised to Reflect Current Datasheet, Issued for Permitting Use	Jessica Jackson	Cliff Slater	Suzanne Kirk
0	9/17/02	Issued for Permitting Use			

Processed Data Entry ☐ Copied QA ☐ Scanned ☐ Filed

BECHTEL	**MECHANICAL DATA SHEET: VESSEL**	**PLANT ITEM No.** ***24590-PTF-MV-PWD-VSL-00046***

Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Shell	***SA 240 316 with max. Carbon of 0.030 %***	***See Drawing***	***Primary***
Head	***SA 240 316 with max. Carbon of 0.030 %***	***See Drawing***	***Primary***
Support	***SA 240 304 with max. Carbon of 0.030 %***	***See Drawing***	***Not Applicable***
Jacket/Coils/Half-Pipe Jacket	***Not Applicable***	***Not Applicable***	***Not Applicable***
Internals	***SA240 316 with max. Carbon of 0.030 %***	***See Drawing***	***Dip Pipe Primary***
Pipe	***SA312 TP316 Seamless with max. Carbon of 0.030 %***	***See Drawing***	***See Note-1***
Forgings/ Bar stock/ Flange	***SA182 F316 with max. Carbon of 0.030 %***	***See Drawing***	***See Note-1***
Gaskets (for Blind Flange only)	***See Note-4***	***See Drawing***	***Auxiliary***
Bolting (for Blind Flange only)	***SA193 B8***	***See Drawing***	***Not Applicable***

Miscellaneous Data

Orientation	***Horizontal***	Support Type	***Saddles***
Insulation Function	***Not Applicable***	Insulation Material	***Not Applicable***
Insulation Thickness (inch)	***Not Applicable***	Internal Finish	***Note 3***
		External Finish	***Note 3***

Remarks

* To be determined by the vendor.

Note 1: Nozzle necks and flanges below the high operating liquid level are Primary, others Auxiliary

Note 2: Vessel supports shall be designed to restrain the vessel in a fully buoyant state

Note 3: Welds surface shall be de-scaled as laid

Note 4: Spiral Wound with 316L inner & outer ring, 316L winding with flexible graphite filler, Class 150 per ASME B16.20 (to suit ASME B16.5 flange)